Marine Life Protection Act Initiative



SAT Evaluation of Water and Sediment Quality of North Coast External Proposed MPA Arrays

Presentation to the MLPA Blue Ribbon Task Force
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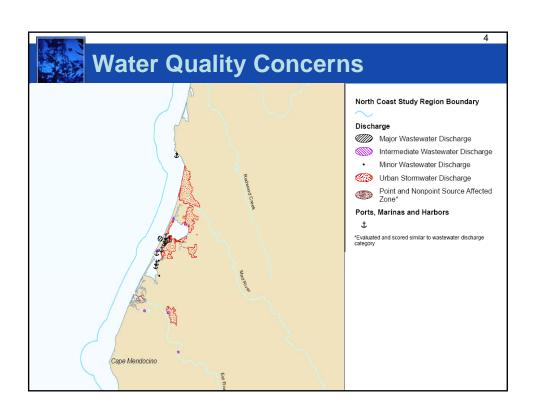
Water Quality Overview

Guidance Document and Maps

- Water quality opportunities
 - Area of special biological significance (ASBS), a subset of state water quality protection area (SWQPA)
- Water quality concerns to avoid

Evaluation Methods and Round 1 Results





Water Quality Guidance

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SAT Recommendations

- Co-location, where possible, with SWQPAs
 - -ASBSs are special subset of SWQPAs
- Avoiding, where possible, areas of water quality concern:
 - Urban stormwater and nonpoint sources of pollution (e.g. harbors)
 - -Wastewater point sources
 - 1. Major sources ½ mile radius buffer
 - 2. Intermediate sources ¼ mile radius buffer
 - 3. Minor sources avoid outfall point



Evaluation Methods

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- Two categories of marine protected areas (MPAs):
 - 1. Bay and estuary MPAs
 - ➤ Bays and estuaries are more likely to be associated with storm-water runoff
 - ➤ No areas of special biological significance (ASBSs) currently designated in embayments
 - Coastal MPAs
 - Coast and offshore rocks
 - Large ASBSs provide opportunities for colocation

Scoring of MPA Proposals

- Scores based on presence/absence of areas of water quality concern and opportunity
- Co-location with areas of water quality concern:
 Water quality scores deducted
 - Stormwater and nonpoint source discharges (-1)
 - Industrial/municipal wastewater discharges (-0.5)
- Co-location with areas of water quality opportunity:
 Water quality scores increased (+0 to 1)
 - State water quality protection areas (SWQPAs) and ASBSs



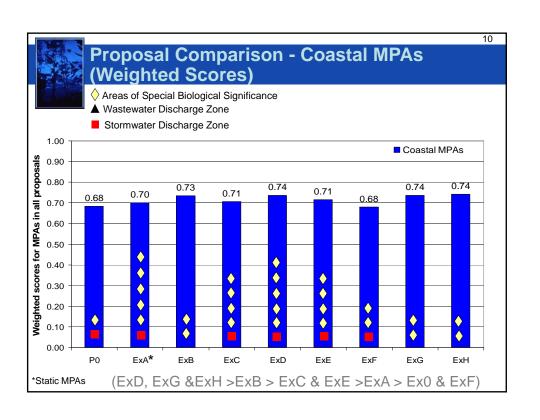
Evaluation Scoring Methods

• 0.00 is the least desirable and has serious water-quality concerns

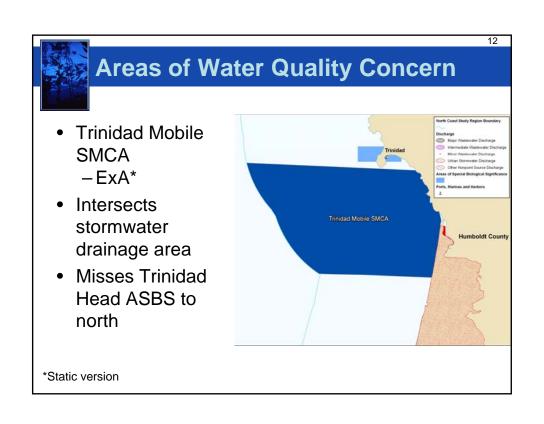
- For embayment MPAs, 1.00 is considered the most desirable, with no water-quality concerns
- For coastal MPAs, 0.67 is desirable, indicating no water-quality concerns
- Coastal MPAs with scores over 0.67 indicate they are co-located with an area of special biological significance (ASBS) / state water quality protection area; a score of 1.00 is the most desirable

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Round 1 Summary

- External arrays did well with only two MPAs (one repeated in five arrays) containing water quality concern area
- Half of external MPA arrays contained at least two ASBSs, and other half contained more than two
- All external MPA arrays contained MPAs within a bay or estuary free of SAT-defined water quality concerns



Round 1 Summary, conclusion

 Water-quality evaluations are not mandated by the master plan for MPAs, and should therefore be considered secondary to other MPA design guidelines. Water-quality considerations should be incorporated if other guidelines and criteria have been met. 14